





(REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Notch Gordon @ 3359'. Fractured with 580 barrels of gelled diesel, 50,000# of 20/40 sand. ATP 3050 psi. ATR 15.6 BPM.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Undifferentiated SS & SH			0'	2460'	Pittsburgh Coal @ 1215'
Greenbrier	Tan-Gy	H	2460'	2518'	
Keener	Wt-Gy	H	2518'	2574'	
Shale	Gy	S	2574'	2587'	
Big Injun	Wt-Gy	M	2587'	2754'	
Shale & Slst	Gy	M-S	2754'	2917'	SSG
Weir	Gy	H-S	2917'	2953'	SSG
Shale & Slst	Gy-Gn	S	2953'	3101'	
Berea	Tan-Gy	H	3101'	3122'	SG
Shale & Slst	Gy-Gn	S	3122'	3337'	
Gordon Stray	Wt.	H-S	3337'	3341'	SSG
Slst	Gy	H-S	3341'	3357'	
Gordon	Wt.	H-S	3357'	3367'	SG
Slst	Gy	S	3367'	3392'	
Fourth	Wt.	S	3392'	3400'	SG
SH & Slst	Gy	S	3400'	3487'	T.D.

All depths are G.L.

3487

3367

(120' expl. ftg.)

(Attach separate sheets as necessary)

Inverness Petroleum Inc.

Well Operator

By: Carl A. Boe Petroleum Geologist

Date: Carl A. Boe November 10, 1982

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including ... encountered in the drilling of a well."



PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Pyramid Drilling Company

Address Route #4 Box 392

Marietta, OH 45750

GEOLOGICAL TARGET FORMATION Warren
Estimated depth of completed well 4400' feet. Rotary X / Cable tools /
Approximate water strata depths: Fresh, N/A feet; salt, 2400 feet.
Approximate coal seam depths: 1400'
Is coal being mined in this area: Yes / No X /

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For Drill-ling, Left in Well), CEMENT FILL (UP OR SACKS, Cubic ft.), PACKER'S (Kinds, Sizes, Depths set, Perforations: Top Bottom)

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code 822-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code 822-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code 822-4-12a, and (v) if applicable, the consent required by Code 822-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.
A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE.
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
/ APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE
IF OPERATIONS HAVE NOT COMMENCED BY 1-15-83.
BY [Signature]

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 822-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: , 19 .

By: [Signature]
Its: \_\_\_\_\_